

EUROSAI WORKING GROUP ON THE AUDIT OF FUNDS ALLOCATED TO DISASTERS AND CATASTROPHES







JOINT REPORT ON THE RESULTS OF INTERNATIONAL COORDINATED AUDIT ON PROTECTION OF THE BUG RIVER CATCHMENT AREA FROM POLLUTION (FOLLOW-UP AUDIT)

CONTENT

PREAMBLE	3
INTRODUCTION	5
I. JOINT CONCLUSIONS AND RECOMMENDATIONS OF THE INTERNATIONAL AUDIT	9
II. GENERALIZED AUDIT FINDINGS	12
III. NATIONAL AUDITS FINDINGS	18
COMMITTEE OF STATE CONTROL OF THE REPUBLIC OF BELARUS	18
SUPREME AUDIT OFFICE OF THE REPUBLIC OF POLAND	21
ACCOUNTING CHAMBER OF UKRAINE	25

PREAMBLE

Supreme Audit Institutions (hereinafter – SAIs) of the Republic of Belarus, Republic of Poland and Ukraine conducted international coordinated audit on protection of the Bug River catchment area from pollution in 2006 (in hydrography of Belarus and Ukraine Bug River is called Western Bug River).

The Supreme Audit Office of Poland was coordinator of the parallel audit.

Aim of the parallel audit was to check and evaluate:

- international cooperation in the sphere of protection of the Bug River frontier basin waters from pollution;
- implementation of recommendations of the Pilot Project on implementation of guidelines for the monitoring and evaluation of pollution of frontier waters of the Bug River basin, according to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes;
- investment activities aimed at improving of purity of the Bug River basin waters and efficient use of state financial resources allocated to implementation of these tasks.

Taking into account the fact that pollution of waters in the Bug River basin is a significant problem for states on whose territories it is situated, SAIs of the Republic of Belarus, the Republic of Poland and Ukraine conducted parallel audit and recommended Governments of their countries to ensure the full implementation of the commitments made at the international level on ensuring quality of waters of this basin.

Given the importance and urgency of the issue of purity of the Bug River basin waters for people, living on its territory, as well as the necessity to implement the EU Water Framework Directive requirements, Supreme Audit Office of the Republic of Poland together with the Accounting Chamber of Ukraine in 2014 initiated an international coordinated audit on Protection of the Bug River Catchment Area from Pollution (follow-up audit), subsequently supported by the Committee of State Control of the Republic of Belarus.

To carry out this audit in 2014 the participants agreed on a Common Position on cooperation for coordinated parallel audit, which defined the purpose, object and general matters of the audit, its scope and limitations, methodology, forms as well as cooperation and coordination procedures.

The purpose of the international coordinated follow-up audit was to assess the implementation of the SAIs' recommendations, which were provided after previous audit, completed in 2006.

Also it was supposed to analyze the activities of the responsible authorities of Belarus, Poland and Ukraine on addressing the issues, raised by the previous audit, namely:

• low level of international cooperation activities in the frontier waters of the Bug

River basin at the state and regional levels;

- changes in the level of water pollution, determined according to the national monitoring systems;
- insufficient effectiveness of investment and non-investment activities aimed at reducing the pollution of the Bug River basin waters and sustainable management of its water resources.

The subject of the international audit was:

- activities of the governmental bodies aimed at protection of the Bug River basin waters from pollution, including in the framework of international cooperation;
- budgetary funds aimed at protection of the Bug River basin waters from pollution.

The total period covered by the audit is 2012–2014.

Methodology of conducting the audit was in line with:

- International Audit Standards of INTOSAI;
- national audit standards and/or guidelines of participating SAIs.

Cooperation between the Parties took place in the form of conducting the coordinated national audits, taking into account the audit aim and the subject, in the framework of the EUROSAI Working Group on the Audit of Funds Allocated to Disasters and Catastrophes.

The national audits were conducted in accordance with the national programs of the Parties under the overall coordination of the Accounting Chamber of Ukraine.

The Parties could decide on the contraction or expansion of the subject matters, as well as the audit framework at the national level.

The exchange of information was carried out by e-mail (discussion of the joint documents drafts, exchange of experience, coordination of structure and text of the joint report etc.). In addition, within the framework of the international audit four meetings of the representatives of the Parties were held on the following issues:

- signing of the Common Position on Cooperation for Coordinated Parallel Audit (Lviv (Ukraine) September, 2014);
- presentation of the preliminary results of national audits (Lublin (Poland) June, 2015);
- signing of the Communiqué on Results of Coordinated Parallel Audit on Protection of the Bug River Catchment Area from Pollution (Follow-up Audit) (Lublin (Poland) April, 2016);
- signing of the Joint Report on the Results of International Coordinated Audit on Protection of the Bug River Catchment Area from Pollution (Follow-up Audit) (Rome (Italy) March, 2017).

INTRODUCTION

The Bug River originates on the territory of Ukraine in Lviv Region Verhobuzh village and flows into the River Narev near Zebzhinsky Bay on the territory of the Republic of Poland.

The total length of the Bug River is 772 km, of which on the territory of Ukraine – 184 km, the Republic of Poland – 220 km and 368 km of the river length is a natural state border of neighboring countries, including between Ukraine and Poland 202 km, and between Belarus and Poland – 166 km (Fig.1).

The catchment area of the Bug River is 39.8 thousand km², including on the territory of the Republic of Poland – 19.4 thousand km² (48.7%), Ukraine – 11.2 thousand km² (28.1%) and the Republic of Belarus – 9.2 thousand km² (23.2%).

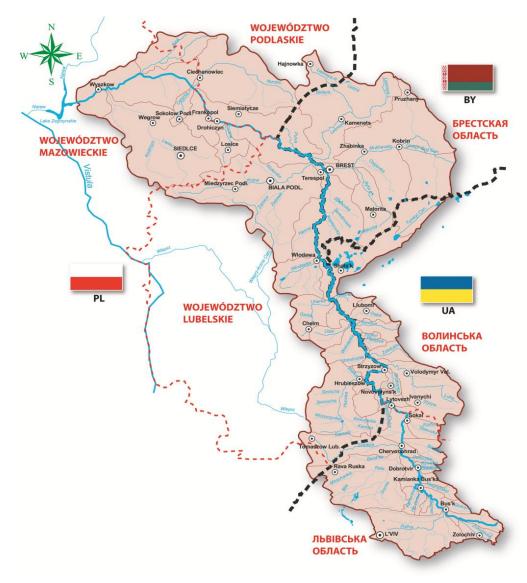


Fig.1 Bug River Catchment Area (zbbuvr.gov.ua)

Historical and natural-and-landscape importance of the river for the population within its catchment area is reflected in an attempt to perpetuate the memory of it. In particular, an allegory of the Bug River is depicted in the statue on the terrace of the Palace on the Water in Warsaw (the Republic of Poland), as well as in Zolochivsky Castle in Lviv Region.

At the end of the 19th century, a lot of grain and timber were floated on the Bug River towards Warsaw and Gdansk, but in the 20th century this trade route ceased to exist.

At the end of 2016 the population on the territory of the Bug River basin was nearly 3 million people, including on the territory of Belarus – more than 600 thousand people, on the territory of Poland – 530 thousand people and on Ukrainian territory – almost 1.7 million people.

The area of the basin and its population mostly determine the main sources of pollution of the Bug River waters.

In the Ukrainian part of the basin, the main sources of pollution are enterprises of housing and communal services, the coal industry and agriculture.

From the Belarusian side – mainly agricultural enterprises, namely farms for breeding and store feeding animals, industrial enterprises and water transport.

At the frontier part of the Bug River basin on the Polish side, the main sources of waters pollution are also enterprises of housing and communal services, agricultural farms, and insignificantly, the industrial enterprises, mainly of the sugar and cement industries.

At the same time the natural and landscape values of the Bug River valley entrusts states, located in its basin, the obligation to preserve this wealth.

In Ukraine, in the Bug River basin, 53 objects of National Ecological Network are located, out of which 49 are of local importance and 4 – are of national importance, including the Shatsky National Natural Park.

The southern part of the National Park "Bialowieza Forest" and 16 wildlife reserves, 4 of which are of republican significance, and 12 – of local, are located on the Belarusian side.

On the Polish side, in the framework of the National Ecological Network, protected area—"Poleski area" was set up, and there are the Polish National Park, 7 landscape parks and 18 areas of the European ecological Network NATURA 2000.

Whereas the protection and usage of transboundary watercourses and international lakes are important objectives, which could be effectively achieved only through close cooperation, the state authorities of the Republic of Belarus, the Republic of Poland and Ukraine ratified and became parties the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Ukraine on 01.08.1999, the Republic of Poland on 17.02.2000 and the Republic of Belarus on 29.05.2003).

By ratifying the Convention, its Parties undertook for appropriate measures aimed at:

- prevention, control and reducing of water pollution that causes or may cause transboundary impact;
- usage of transboundary waters to ensure ecologically grounded and rational management of water resources, its preservation and environmental protection;
- usage of transboundary waters to ensure reasonable and equitable manner with particular reference to their cross-border nature in the course of activities which cause or may cause transboundary impact;
- ensuring of conservation and renewal of ecosystems.

Findings of the international coordinated audit on protection of the Bug River catchment area from pollution, completed in 2006, revealed that since 1998, on the initiative of the United Nations a Project of monitoring and evaluation of the quality of the Bug River basin waters was launched in the Republic of Belarus, the Republic of Poland and Ukraine. The project was conducted within the framework of implementation of the Directives on the Monitoring and Evaluation of Cross-border Rivers (the Task Force of the UN Economic Commission on Monitoring and Evaluation).

Ukraine completed corresponding project in 2001, and the Republic of Belarus and the Republic of Poland – in 2003. However, the implementation of received recommendations was slow, and many important findings were ignored, namely:

- the Trilateral Polish-Belarusian-Ukrainian Commission on the Use and Protection of Water Resources of the Bug River basin, which could provide integrated management of water resources of the basin and the initiation of multilateral cooperation in this regard has not been created;
- unification of water systems evaluation and analytical methods was not ensured;
- the common monitoring program for the Bug River basin waters was not developed;
- the common database for information sharing and archiving was not prepared.

As of 2006, trilateral cooperation between states in the field of transboundary waters was not carried out.

Thus, the bilateral cooperation between the countries had not led to adoption of common research methods and classification of waters purity, purification of discharged waters, and the method of informing the relevant services about circumstances that threaten the purity of catchment area.

The volume and efficiency of investment activities in the Bug River catchment area, aimed at preventing the waters pollution and improvement of waters quality, were insufficient and different in each country (almost 43 million EUR was used in three countries during 2003–2005 while demand was 150 million EUR).

In Ukraine, about 1.4 million EUR was allocated to the modernization of sewage treatment systems in the Bug River catchment area during 2003–2005, *while demand is about* 27 million EUR.

According to the SAI of Ukraine, the investment activity, carried out on the Ukrainian territory of the river basin, was insufficient and did not provide the necessary water quality.

In the Republic of Belarus 4.8 million EUR was allocated for activities related to the protection of the Bug River catchment area from pollution during 2003–2005. Funds were mainly allocated to modernization and construction of treatment wastewaters stations. Also a number of research works aimed at improvement the ecological state of the Bug River catchment area was funded. Financial demand for a comprehensive implementation of all necessary measures was amounted about 12 million EUR.

The State Program of Cleaning Communal Wastewater, which determined the amount of planning construction works and works of modernization of treatment stations of municipal waste waters, has been implemented in the Republic of Poland since 2004.

During 2003–2005, 36.7 million EUR was allocated to the implementation of these targets on the Polish territory of the Bug River basin, while demand was amounted at 110.4 million EUR.

Taking into account the audit findings and with the aim to improve the efficiency of administrative decisions and the use of financial resources aimed at improving the quality of the Bug River basin waters, the SAIs of the Republic of Belarus, the Republic of Poland and Ukraine **recommended** to the Governments of their countries to:

- unify and implement a common system for monitoring and evaluation of the quality of the Bug River basin waters;
- create a Belarusian-Polish-Ukrainian Commission on Exploitation and Protection of Water Resources of the Bug River basin;
- accelerate implementation of the recommendations made by the Pilot Project on Implementation of Guidelines for the Monitoring and Evaluation of Pollution of Frontier Waters of the Bug River Basin for each of the States;
- increase investment activity and ensure the completeness of the financing of measures aimed at improving the state of the Bug River basin waters, which will significantly increase the efficiency of their use.

The main purpose of the audit completed by SAIs of Belarus, Poland and Ukraine in 2016 is assessment of implementation the recommendations on the results of previous international audit (completed in 2006) by governments and relevant state authorities of these countries as well as possible progress in resolving of revealed problems.

I. JOINT CONCLUSIONS AND RECOMMENDATIONS OF THE INTERNATIONAL AUDIT

Taking into account the importance of the problem of purity of the Bug River basin waters and based on the conducted the international coordinated audit on Protection of the Bug River Catchment Area from Pollution (follow-up audit), the SAIs of the Republic of Belarus, the Republic of Poland and Ukraine **jointly concluded** the following:

1. The responsible authorities of the participating countries of the audit within the cross-border cooperation in the Bug River basin gained a significant amount of regulatory and methodical documentation for the improvement of water policy, the development of international cooperation and the adoption of measures to improve the ecological condition of the basin waters.

At the same time as a result of lack of coordination, the duration of decision-making and inefficient cooperation, these authorities did not ensure the full implementation of the recommendations, which are still topical, provided by the completed in 2006 the international coordinated audit on protection of waters in the Bug River catchment area from Pollution.

The problem of waters pollution of this river basin, the deterioration of their quality and unregulated riverbeds becomes critical already at three levels:

- regional contamination of ecosystems at the regions within the Bug River basin;
- state the risk of gradual loss of the territory in the border area;
- international the pollution of ecosystems in other countries because of transboundary movement of pollutants.
- **2.** International cooperation aimed at improving of the state of the Bug River basin, was ineffective and since 2006 it was not improved.

In particular, the question of tripartite negotiation documents on international cooperation on the exploitation and protection of water resources of the Bug River basin, harmonization and implementation of common systems and programs, monitoring and evaluation of water quality, regulation of certain issues of practical measures in the sphere of international cooperation are unresolved.

Consequently, this situation causes a negative impact on the development of cooperation in the river basin.

3. As a result of the investment activities of the countries of the Bug River basin it became possible to achieve individual improvement showings of quantitative and qualitative indicators, which characterize the wastewater disposals into the river basin.

In particular, the SAIs-participants of audit appreciated the fact that the National Fund

for Environmental Protection and Water Resources of the Republic of Poland provided financial assistance to the Belarusian side for the modernization of sewage treatment plants in Brest city to enhance environmental safety of waters of the Bug River basin.

However, the results of water monitoring at the regional level revealed that Bug River basin waters are polluted and water quality has not been improved.

4. The main prerequisite of failing to improve the qualitative state of the Bug River basin waters was failure to timely execute planned programs, plans and activities aimed at environmental rehabilitation of basin waters, due to lack of financial resources.

In particular, the largest share of funds used in Belarus and Ukraine was budget resources, but these volumes of funds are insufficient to solve the problem of pollution of the Bug River basin waters.

At the same time, investment activity, carried out with the aim of improving the state of water in the Bug River catchment area is still insufficient and does not ensure the achievement of the objectives.

According to experts' opinion, the demand in financial resources to meet the needs in improvement of qualitative state of the Bug River basin waters is more than 700 million EUR.

As a result, the purity of the Bug River basin water has not significantly improved, mainly due to the physical and moral obsolescence of treatment facilities of water and sewerage systems in cities located in the Ukrainian part of the basin (Lviv, Kamenka-Buzka, Liboml'). Therefore it leads them to a state of emergency and increase threats of uncontrolled discharges.

Based on the international audit conclusions and taking into account existence difficulties with financial provision of environmental protection measures within Bug River basin, SAIs of the Republic of Belarus, the Republic of Poland and Ukraine України **emphasize attention** of the respective authorities of their countries on the need to restore, enhance and develop international cooperation in the Bug River catchment area both at national and local levels.

Main directions of the international cooperation in this area should be following:

- coordination of national policies and activities on the usage and protection of Bug River basin waters, particularly through the establishment of the Belarusian-Polish-Ukrainian Commission on these issues and signing of the relevant agreement;
- unification of systems and programs of monitoring and evaluation of water quality of the Bug River catchment area;
- introduction of unified database of qualitative and quantitative indicators of water use in the Bug River catchment area and providing common access to all stakeholders;
- participation and implementation of joint environmental protection measures and

projects aimed at protection of Bug River catchment area from pollution.

Also, SAIs of the Republic of Belarus, the Republic of Poland and Ukraine recommend to the relevant authorities of their countries to make more efforts to attract additional sources of funding such measures.

These sources of funding could be: UNDP Global Environment Facility (hereinafter – UNDP GEF), Program of Cross-Border Cooperation "Poland-Belarus-Ukraine" for 2014–2020, as well as the National Fund for Environmental Protection and Water Resources of the Republic of Poland.

Taking into consideration the results of the international audit, the SAIs of the Republic of Belarus, the Republic of Poland and Ukraine have decided to continue cooperation in this field by means of conduction of national and joint international audits as well as activities resulting from implementation of the Parties' recommendations, which were reflected in appropriate Communiqué.



Chairman
of the Committee of
State Control of
the Republic of Belarus

President
of the Supreme Audit
Office of
the Republic of Poland

Krzysztof KWIATKOWSKI YRPAIH R

Acting Chairman of the Accounting Chamber of Ukraine

Aleksandr YAREMENKO

Leonid ANFIMOF

II. GENERALIZED AUDIT FINDINGS

Conducted national audits of SAIs of the Republic of Belarus, the Republic of Poland and Ukraine have shown that in order to implement recommendations of the international coordinated audit on protection of the Bug River catchment area from pollution, completed in 2006, the international project "Development of the Polish-Belarusian-Ukrainian Water Policy in Bug River Basin" (hereinafter – PL-BY-UA Project) was carried out during 2007–2009. The project was implemented within the framework of "Neighborhood Program Poland-Belarus-Ukraine INTERREG IIIA/TACIS CBC".

PL-BY-UA Project partners were:

- from the Belarusian side the Brest Regional Committee of Natural Resources and Environment in Brest city;
- from the Polish side the Regional Water Management Administration in Warsaw and the Center of Water Expertise in Lublin city;
- from the Ukrainian side the Volyn Regional Water Management Administration of Water Resources, as well as the Western Bug Basin Directorate in Lutsk city (external expert).

The main financial partner of the PL-BY-UA Project was the Institute of Environmental Protection in Warsaw, Poland.

The goal of the PL-BY-UA Project was creation of the International Commission on the Protection and Use of Water Resources of the Bug River basin (hereinafter – the Bug International Commission).

Activity of the Commission was to cover all the issues related to the management of surface and ground waters in the basin, in particular: use of water resources, their quantitative and qualitative protection; qualitative and quantitative monitoring of surface waters; flood protection and protection from drought; protection from natural disasters.

The practical results of the implementation of this international project were the expert's recommendations, the implementation of which would significantly improve the water management of the Bug River basin in each of the three countries as well as within the entire basin.

These recommendations concern the necessity to establish:

- the Bug International Commission and the relevant Working Groups in its structure:
- extended hydrographic basin maps and their filling in accordance with the requirements of the EU Water Framework Directive;
- joint system for data collection and access to databases;

• joint system for monitoring and evaluation of surface waters in the basin.

As the result of the PL-BY-UA Project the draft legislative, executive and financial documents were prepared, including drafts tripartite agreement on the establishment of the Bug International Commission, and its financial justification.

In accordance with the work schedule, which was presented in the PL-BY-UA Project, it was expected that a draft agreement on the establishment of the Bug International Commission would be presented in August 2009. It was also supposed that the agreement would be signed in March 2011, and its ratification by participating countries would start in April 2011.

However, the Governments of three countries could not agree the Joint (common) draft agreement and the Tripartite Commission on the Protection and Use of the Bug Basin Water Resources has not been established.

As a result, practical cooperation on the protection and use of water resources of the Bug River basin between the relevant authorities of Belarus, Poland and Ukraine, as in previous periods, was carried out based on bilateral agreements.

In particular, the economic, scientific and technical cooperation in the field of water management on transboundary waters between Belarus and Ukraine is based on the Agreement between the Cabinet of Ministers of Ukraine and the Government of the Republic of Belarus on Joint Use and Protection of Transboundary Waters signed on 16.10.2001.

The organizational form and scope of the Agreement is aimed at the exchange of information, mutual consultations and the search for joint solutions on key issues: limitation of the discharge of pollutants; achieving the status of aquatic ecosystems, approximate to the natural; use of surface water resources for water supply.

At the same time, the audit revealed that, during 2013–2014 meetings of Commissioner Representatives by the Governments of the Republic of Belarus and Ukraine were not held. It was caused because in 2013 Commissioner Representative of the Government of Belarus was not appointed (appointment took place on 14.03.2014), and from the second half of 2014 – Commissioner Representative of the Government of Ukraine was not appointed as well.

Bilateral cooperation between the Government of Poland and the Government of Ukraine is carried out based on the Agreement on Cooperation in the Field of Water Management on Frontier Waters, which was signed in Kyiv, Ukraine on 10.10.1996.

To fulfill the terms of this Agreement, in 2000 the Polish-Ukrainian Commission on Border Waters was created. Within the Commission, there are five international Working Groups, two of which deal with issues of protection of the Bug River basin waters from pollution, in particular:

• the Working Group on Planning Frontier Waters. Since 2000, the Working Group

- is headed by the representative of the Regional authority of water resources management in Warsaw (the Republic of Poland);
- Working Group on the Protection of Transboundary Waters from Pollution, which is headed by the Carpathian Provincial Inspectorate of Environmental Protection in Rzeszow (the Republic of Poland).

In addition, the audit showed that during 2007-2015, the Working Group on the protection of transboundary waters from pollution did not fulfill the tasks specified in its rules.

In particular, practical measures for cooperation on frontier waters on standards of quality, collaborative research and exchange of information, establishment of requirements and quality criteria for the wastewaters in the frontier waters of the Bug River remain unregulated.

As a result, the Polish-Ukrainian cooperation on protection from pollution does not achieve the effect, and has no significant influence on the change in the ecological status of water objects of the Bug River basin.

Cooperation in the catchment basin of the Bug River between the Republic of Poland and the Republic of Belarus is carried out in the framework of the Intergovernmental Coordination Commission for Cross-Border Cooperation.

Governments of Poland and Belarus since 2000 have started negotiations on the draft agreement on cooperation in the field of water resources in frontier waters management, but the relevant agreement has not been signed.

Consequently, because of absence of a such bilateral agreement, the possibility of cooperation between Poland and Belarus are limited, for example, related the preparation of joint program for improving the quality of the Bug River basin waters or the creation of working groups at the regional level in the framework of international cooperation.

The main reason for a long-term harmonization of the draft agreement and its nonsigning was changes in the legislation of the Republic of Poland related with its membership in the European Union (hereinafter – EU).

Poland, as a member of the EU since 01.05.2004, was obliged to include provisions of EU directives in its legislation, including in the sphere of water protection and use.

The main legal act governing the principles of water resources in Poland is the Law on Water Resources Management dated 18.07.2001, which, together with other legislation ensures compliance with the requirements of the EU Water Framework Directive (hereinafter – WFD).

Based on the Art. 38a, section 3 of the Law on Water Sector, the Minister of Environment issued a Decree dated 20.08.2008 "On the Classification of Surface Water Conditions". During 2009–2014 this Decree was changed three times, in particular in

connection with the remarks of the European Commission on the Transposition of the Rules and Requirements included in the WFD of the Polish legal system.

According to Art. 155b, paragraph 1 of the Law on Water Management, the Minister of Environment of the Republic of Poland issued a Decree dated 13.05.2009 on the forms and methods of monitoring surface and underground waters. He also repealed on 14 December 2011 by § 19 of the Regulation of the Minister of Health of 15 November 2011 on the forms and methods of monitoring the surface water bodies and groundwater bodies, which has been recognized by the European Commission as irrelevant.

The most important change concerned, in particular, identification of territories that need to be monitored, and the establishment of detailed rules for monitoring, as well as increasing the frequency of measurement of physical and chemical elements in accordance with the requirements of the WFD.

Water relations in Ukraine are regulated by the Water Code of Ukraine dated 06.06.95 No 213/95-VR. According to the Code the task of water legislation is, particularly, to regulate the legal relations in order to ensure the conservation, science-based and sustainable water use, reproduction of water resources, protection of waters from pollution, depletion, improvement of water bodies.

The signing and ratification by the Law of Ukraine dated 09.16.2014 No 1678-VII the Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Ukraine, of the other part (hereinafter – the Association Agreement) creates new standards, including in the field of environmental protection.

In particular, ratifying the Association Agreement within the framework of the WFD Ukraine has committed to:

- adopt the national legislation and designation of competent authority; establish of legislative definition of the country's territory hydrographic zoning; develop of appropriate national legislation (Regulation on Basin Directorate) making the "basin Directorate" responsible for functions provided by Art. 3 of WFD shall be *implemented within 3 years* of the entry into force of this Agreement;
- identify the river basin districts and establishment of administrative arrangements for international rivers, lakes and coastal waters; analyse of the characteristics of river basin districts; establish of programmes for monitoring water quality shall be implemented *within 6 years* of the entry into force of this;
- prepare of river basin management shall be implemented *within 10 years* of the entry into force of this Agreement.

At the same time, acting monitoring system of Ukraine does not provide collection, generalization and analysis of information on the classification of the ecological status

of waters, based on the biological (the composition and diversity of aquatic flora) and hydromorphological indicators (water consumption and its dynamics, fluctuations in width and channel depth, structure and composition of the sediment, the structure of the territory adjacent to the bed) – options which, according to the requirements of the WFD, are the base for the classification of surface water bodies according to their ecological status.

Existing technical support of Ukrainian labs of water monitoring entities within the Bug River basin, is not enough to determine the chemical and physico-chemical quality elements foreseen by the WFD, in particular substances classified in the priority list.

Maximum allowable concentrations (hereinafter – MAC) and the norms that are applied since 1988 in determining water quality and limits of pollutants in discharges approved by Sanitary rules and norms of protection of surface waters from pollution, have become obsolete and do not meet modern anthropogenic pressure on water resources.

Thus, despite the presence in Ukraine structured organizational water monitoring system in the Bug River basin, which has the status of transboundary river, coordination of its system and management requires substantial improvements, since it does not ensure the provision of objective information to determine the water body basin ecological and chemical status according to the requirements established for water monitoring in the EU.

In the Republic of Belarus, assessment of the quality of surface waters is based on a comparison of hydro-chemical data collected from water monitoring network, with the standards (quality indicators and the maximum permissible concentration – MPC), established for the water bodies of fishery, using the quality index – the index of pollution of waters. Evaluation of surface water quality on hydrobiological indicators is carried out in accordance with GOST 17.1.3.07-82 "Quality Control Rules of Water Reservoirs and Streams."

On the Bug River 9 measurement and control posts were established by relevant authorities of the Republic of Poland, particularly, four bordering with Ukraine (in Kryłów, Zosin, Horodło and Dorohusk); four bordering with Belarus (in Włodawa, Kuzawce, Kuzawce/Kukuryki and Krzyczewo); and one – 2 km beyond the section bordering with Belarus (in Gnojno).

The results of monitoring conducted by the Provincial Inspectorate of Environmental Protection in Lublin (the republic of Poland) during 2007–2014 according to main physico-chemical parameters, indicated that there is no constant tendency to decreasing the pollution of waters of the Bug River.

In 2007, the Bug River waters were classified as "unsatisfactory", and during 2008–2014 the state of these waters was assessed as "bad".

The highest levels of the excess pollution indicators of the Bug River waters are recorded at the first control-measuring post (Krylov), on the site which borders with

Ukraine.

According to the monitoring conducted by the Westarn Bug Water Directorate (Ukraine) in 2012–2014 the quality of surface waters of the Bug River basin by hydrochemical indicators did not meet the standards for such the most common substances like nitrogen compounds, heavy metals, dissolved oxygen, oils and phenols.

The formation of the hydro-chemical characteristics of the basin is greatly influenced by economic activity that leads to plowing areas, land reclamation, water pollution by wastewater discharges.

However, the main source of pollution of the Bug River is insufficiently treated wastewaters from industrial and municipal enterprises, most of which (more than 90%) was dropped by LCP "Lvivvodokanal" into the Poltva River that flows into the Bug River. It is caused because of unsatisfactory work of the wastewater treatment plants in Lviv city, which are physically and morally worn-out.

Poltva River remains the most polluted water body of the Bug River basin. According to information received from the Central Geophysical Observatory of the State Emergency Service of Ukraine, the ability of aquatic ecosystems Poltva River to auto purification and reproduction is seriously disrupted.

Herewith, one of the main prerequisites of failing to improve the qualitative state of the Bug River basin waters was failure to timely execute planned programs, plans and activities aimed at environmental rehabilitation of water basin, due to lack of financial resources, particularly on the part of Belarus and Ukraine. It causes the necessity of raising additional funds from the budgets of all levels of basin countries and international financial assistance.

III. NATIONAL AUDITS FINDINGS



COMMITTEE OF STATE CONTROL OF THE REPUBLIC OF BELARUS



National audit in the Republic of Belarus was carried out in 2014–2015 by the Department of Control over Agricultural and Environmental Protection Complexes of the Committee of State Control of the Republic of Belarus; the Committee of State Control of the Brest Region with the involvement of representatives of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus; the Brest Regional Committee of Natural Resources and Environmental Protection; the Brest City District Administration of Natural Resources and Environmental Protection; Pruzhany, Zhabynka, Kamenets, Maloryt district Inspections of Natural Resources and Environmental Protection and the State Entity "Republican Center of Analytical Control".

Audit aim:

Evaluation of implementation of recommendations after the results of audit on protection of the waters in the Bug River catchment area from pollution, conducted by the Committee of State Control of the Republic of Belarus, the Supreme Audit Office of the Republic of Poland and the Accounting Chamber of Ukraine in 2006.

Audit subject:

- the activities of governmental bodies, territorial and local authorities concerning fulfillment of recommendations;
- removal and prevention of violations and shortcomings in the sphere of waters protection in the Bug River basin;
- completeness of financing of measures aimed at improving the water quality at the Bug River basin;
- implementation of water protection measures in the Bug River basin.

Issues concerning implementation of measures in the framework of the State programs on water supply and drainage "Pure Water for 2006–2010" and "Pure Water for 2011–2015" were examined during the audit. Measures were carried out at the expense of the republican and regional budgets, republican and regional funds of nature protection (until 01.01.2010) as well as at the expense of own funds of enterprises, international banks loans and international technical assistance grants.

Audited entities:

Municipal Unitary Manufacturing Enterprise "Brestvodokanal", Municipal Unitary Multi-Activity Manufacturing Enterprises for Housing and Communal Services "Kamenets Housing and Communal Services" and "Maloryta Housing and Communal Services"; OJSC "Agro-Zarechje" of Kamenets Region; OJSC "Bilovezky" of Kamenets Region; Municipal Unitary Agricultural Enterprise "Selection and Hybrid Center "Zapadny" of Brest Region, OJSC "Otechestvo" of Pruzhany Region; OJSC "Zhuravlynoe" of Pruzhany Region, Republican Unitary Enterprise "Dorvodokanal" of the Belarus Railway; OJSC "Komarovka" of Brest Region, Joint Venture "Santa-Bremor" Ltd., OJSC "Brest Meat Plant", CJSC "KvartsMelProm" of Maloryta Region, Republican Unitary Enterprise on petroleum products provision "Belorusneft-Brestoblnefteproduct" (of Brest, Maloryta and Kamenets Regions), Brest Branch of the State Enterprise "Belaeronavigatsiya", Municipal Unitary Manufacturing Enterprise "Kobrynrayvodokanal", branch of the Pruzhany Municipal Unitary Manufacturing Enterprise "Komunalnik", Municipal Unitary Multi-Activity Manufacturing Enterprise for Housing and Communal Services "Zhabynka Housing and Communal Services"; OJSC "Pruzhany Milk Plant", OJSC "Zhabinka Feed Plant", checkpoint "Kozlovychy" of the Brest Customs of the Brest Region; Republican Unitary Enterprise "Kobryn Instrumental Plant "Sitomo".

Main audit conclusions and recommendations:

1. A number of measures, directed at reducing of transboundary pollution, were undertaken by Belarusian side. About 25 million EUR was used for the implementation of protective measures during the period since 2007 up to 01.06.2015 at the expense of republican and regional budgets and funds of enterprises. Deficiency of financial resources needed for the completion of the reconstruction of the Brest sewage treatment plant with the system for the removal of nutrients and the reconstruction of biological ponds, the creation of systems for the diversion and cleaning of surface runoff from urban areas in the cities of Brest, Kobrin, Pruzhany, Malorita and Kamenets, construction and reconstruction of treatment facilities in rural areas as well as other activities is about 73.2 million EUR.

Information-analytical and statistical data indicate of positive dynamics of quantitative indicators of wastewater in the Bug River basin. Also the Republic of Belarus has ensured the implementation of a number of international technical assistance projects in this sphere.

2. Tripartite agreements related international co-operation and water resources protection of the Bug River basin are absent at the state level. Therefore international cooperation is realized only in the framework of previously concluded agreements, relevant working groups and commissions.

3. The issue of unification and implementation of overall monitoring and water quality evaluation system of the Bug River basin had not been solved yet.

Taking into account the audit findings, the Committee of State Control of the Republic of Belarus jointly with the Brest Regional Executive Committee recommended to the Government of Belarus to continue the reconstruction of Brest treatment facilities with full adoption of the system of biogenic elements removing and reconstruction of biological ponds, which are the source of secondary contamination of sewage discharged.

In addition, it was recommended to ensure reconstruction of biological treatment facilities in the cities of Kobrin and Pruzhany by commissioning of the complex of nitrogen and phosphorus removing, as well as to provide construction of buildings of dewatering and disposal of sludge.

Management responses:

The construction and reconstruction about 50 objects were completed in the Brest Region after recommendations of the SAIs on the results of audit conducted in 2006.

In particular, the reconstruction of sewage system in Malaryta city, reconstruction of treatment facilities and building of pressure reservoir in Brest city, reconstruction of manure removal systems in 5 livestock complexes of Kamenets, Pruzhan and Brest Regions were completed.

Also the construction of several treatment facilities was finished in a number of agricultural organizations, industrial and processing enterprises of Kamenets, Brest, Maloryta Regions and Brest city. In August, 2014 a new aeration tank was commissioned at the treatment plant in the Brest city that led to improving wastewater treatment from biogenic elements. As a result, efficiency of sewage treatment plants was improved, particularly concerning water purification from: ammonia nitrogen – by 11%, total nitrogen – by 7%; total phosphorus – by 12%. In addition, efficiency of water purification facilities from organic pollution and suspended solids was increased.

A problem with utilization of wastewater containing manure in agricultural enterprise "Zapadny" of the Brest Region was resolved by its usage in biogas energy complex.

The construction works of sewage treatment plants in Kamyanets city are almost completed.

Also in accordance with the proposition of the Committee of State Control, the Ministry of Architecture and Construction elaborated a number of technical normative legal acts in the field of architecture, urban planning and construction activities, particularly related to reconstruction and construction of wastewater treatment facilities. It was realized as part of technical regulation and standardization programs.

Adopted technical codes of practice were designed considering nowadays environmental requirements and provisions of international and European standards.



SUPREME AUDIT OFFICE OF THE REPUBLIC OF POLAND



The national audit in the Republic of Poland was carried out by the Supreme Audit Office of the Republic of Poland (hereinafter – SAO) in 2015, on the basis of Art. 2, section 1 of the Act of 23 December 1994 on the Supreme Audit Office. Audit was conducted with regard to the criteria established in Art. 5, section 1 of the aforementioned Act, i.e. legality, economy, expediency and regularity.

The audit was conducted by the auditors of SAO Regional Branch in Lublin. The assessments, remarks and conclusions were included in four post-audit statements addressed, on the basis of Art. 53, section 6 of the Supreme Audit Office Act, to the heads of the audited entities.

Audit aim:

To assess the implementation of the post-audit recommendations prepared after SAO audit conducted in 2006, aimed at achieving a good condition of the waters in the Bug River catchment area.

Audit subject:

In course of the audit the implementation of the tasks concerning the following issues was examined and assessed:

- implementation of the WFD provisions concerning the surface waters protection from pollution;
- international cooperation concerning the quality of the waters in the border Bug River and the implementation of recommendations formulated within the "Pilot Project for the Monitoring and Assessment of the Water Quality in the Bug River Catchment Area";
- monitoring of the Bug River catchment area;
- use of public funds dedicated to the execution of tasks connected with the protection of the Bug River catchment area from pollution.

National audit covered the timeframe since 1 January 2007 till 30 June 2015, as well as the activities undertaken before and after this period, if they were directly linked with the audit subject.

Audited entities:

Ministry of Environment of the Republic of Poland; Regional Water Management Authority in Warsaw; Lubelskie Voivodeship Office in Lublin; Voivodeship Environmental Protection Inspectorate in Lublin.

Main audit conclusions and recommendations:

1. In 2007-2014 the purity of the waters in the Bug River catchment area did not significantly increase in spite of increasing of some indicators of pollution of the Bug River tributaries due to investments of Polish and Belarus sides (allocated to the construction and modernisation of the wastewater treatment plants and sewerage systems).

The condition of the waters in the Bug River itself, according to the monitoring research, was assessed by the Inspection for Environmental Protection (in Warsaw) as unsatisfactory. The implementation of the environmental objectives, i.e. achieving at least good ecological condition of the waters, was deemed in the "Management Plan of the Vistula Basin Waters" as threatened and postponed since 2015 to 2021, and in some cases even to 2027.

A good condition of waters was not achieved and the dates specified in the WFD were postponed mainly due to the pollution of Bug River waters outside Polish borders, i.e. in the region of Ukraine from which untreated or not sufficiently treated urban and industrial wastewater was discharged to the river, constituting around 93% of its total volume, disposed of on the joint Polish-Ukrainian section of Bug, as well as the region of Belarus, which was pointed out by SAO during the audit conducted in 2006.

2. The activities of the audited authorities responsible for the execution of tasks connected with the management and protection of the water resources, as well as the cooperation on the border waters undertaken in order to protect the waters in the Bug River catchment area from pollution were inefficient, dispersed and uncoordinated.

The authorities did not use the remarks formulated during the audit conducted by SAO in 2006, moreover several post-audit recommendations were not entirely implemented.

- 3. The international cooperation conducted by the Ministry of Environment aimed at improving the condition of the Bug River catchment area was ineffective, which was pointed out by SAO in 2006. This concerned in particular the cooperation with Ukraine, which was conducted by the Polish party formally, and no reaction of the Minister to the information that the Ukrainian party did not execute the established commitments to undertake activities in order to decrease the pollution of the Bug River waters in Ukraine.
- 4. The Minister of Environment, acknowledging the provisions of the WFD, issued the overdue executive acts to the Water Law Act, related classification and assessment of surface waters and the means and form of their monitoring, thereby implementing a 2006 post-audit recommendation of SAO. But these acts were issued out of time.
- 5. The Lubelskie Voivode, as a representative of the Council of Ministers in the voivodeship in which a 368 km section of Bug River constitutes a natural border between Poland, Belarus and Ukraine, did not initiate any international activities aimed at improving the purity of the Bug River, which was pointed out by SAO in 2006.

- 6. The Director of the Regional Water Management Authority in Warsaw prepared the required planning documentation needed to draw up i.a. the "Management Plan of the Vistula Basin Waters", concerning also the condition of the water and sewage management on the Ukrainian side of the Bug River catchment area.
- 7. The Voivodeship Environmental Protection Inspectorate in Lublin monitored the waters in the Bug River catchment area, in compliance with the regulations in force and the WFD requirements.
- 8. SAO positively assessed the fact that the National Fund for Environmental Protection and Water Management of the Republic of Poland (hereinafter the Fund) provided financial aid to the Belarusian party, to modernise the wastewater treatment plant in Brest, in the total amount of PLN 5.522,6 thousand, aimed at decreasing the ecological threat for the waters of the Bug River catchment area.

Considering the abovementioned, SAO recommended:

- 1. The Minister of Environment to undertake activities aimed at:
- 1.1. Implementing the post-audit remarks and recommendations prepared by SAO in 2006 to:
 - submit to the Ukrainian side, Belarusian side and the European Commission the draft agreement on the International Committee for the Protection and Use of the Water Resources in Bug River Catchment Area, in order to sign it and appoint the aforementioned Committee;
 - effectively execute the international cooperation on Bug River waters, specified in the Agreement on the Cooperation on Border Waters and in WFD, aimed at decreasing Bug River waters pollution outside Poland;
 - enable the Lubelskie Voivode to actively participate in the works of the Polish-Ukrainian Committee for the Border Waters Protection and undertake activities by the Committee in the scope of Bug River protection from pollution.
- 1.2. Appointing a Government Plenipotentiary for Cooperation on Border Waters by the Polish Council of Ministers, in connection with the implementation of the Agreement between the Polish and Ukrainian governments on the cooperation concerning the water management on border waters.
- 1.3. Appointing a co-chairman of the Polish-Belarusian Committee for Environmental Protection Cooperation and informing the Belarusian side about this fact by diplomatic means.
- 2. The Lubelskie Voivode to undertake activities aimed at:
- 2.1. Getting actively involved in the international cooperation on the Bug River border waters and informing the Council of Ministers on the most significant problems connected with the implementation of the cooperation.

- 2.2. Establishing rules for cooperation and coordination of activities at regional level concerning the protection of the waters in the Bug River catchment area, in particular with competent authorities in the border provinces of Ukraine and Belarus, i.e. implementing SAO post-audit recommendation of 2006.
- 3. The Voivodeship Environmental Protection Inspectorate in Lublin to continue and initiate further activities aimed at eliminating the discharge of untreated wastewater by the Ukrainian side into the Ukrainian Bug catchment area.
- 4. To all authorities responsible for the protection of waters in the Bug River catchment area from pollution and international cooperation in this scope to take measures directed to:
 - execution of effective and coordinated activities aimed at decreasing, in Poland and outside the country, the amount of pollution being discharged into Bug River, and achieving good condition of surface water bodies within dates specified in the WFD;
 - broaden the activity of Polish institutions within the international cooperation conducted in order to fulfil mutual obligations resulting from the concluded agreements.

Management responses:

The Minister of Environment and the Lubelskie Voivode informed SAO that the aforementioned recommendations were implemented and respective activities in this scope were undertaken.

During the audit, Provincial Inspectorate of Environmental Protection in Lublin sent a letter to the Deputy Chairman of the Board of Fund and the Chairman of the Supervisory Board of the Fund asking for the possibility to consider providing financial assistance to Ukrainian partner for the modernization of sewage treatment plants in the Ukrainian cities of Lviv, Kaminka-Buzka and Lyuboml. In the letters it was noted that the treatment facilities in these cities have the most significant effect on the purity of the waters of the river basin.

In response, the Deputy Chairman of the Fund, as well as on behalf of the Supervisory Board Chairman, informed Provincial Inspectorate of Environmental Protection in Lublin, that this financial assistance is possible, given that the Foundation has experience in financing outside the country, such as the modernization of wastewater treatment facilities in Brest city (the Republic of Belarus).

The letter also contains information that findings on possible financing will depend on the provision of data by the recipient, in particular, on the amount of work required, the estimated costs and the planned environmental benefits to be achieved as a result of the investment, including indicators of reduced pollution in the river in Poland.



ACCOUNTING CHAMBER OF UKRAINE



National audit in Ukraine was conducted by the Accounting Chamber of Ukraine in 2015 on the basis of the Constitution of Ukraine (Art. 98) and Law of Ukraine "On the Accounting Chamber".

Audit was carried out by the representatives of the Department on the Audit of Agricultural Industry, Environmental Protection and Emergency Situations jointly with representatives of the ACU Regional Department for Lviv, Volyn, Rivne, Ternopil, Ivano-Frankivsk and Transcarpathian Regions (office in Lviv city).

Audit aim:

The establishment of the actual state of implementation by the relevant state bodies of Ukraine of the recommendations of the Accounting Chamber prepared after the audit on Protection of the Waters in the Bug River Catchment Area from Pollution completed in 2006, in particular:

- implementation and effectiveness of measures aimed at protection of the waters of the Bug River catchment area from pollution, within the framework of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes;
- increasing of the efficiency of use of state budget funds allocated for protection of the Bug River basin from pollution.

Audit subject:

The activities of central and local executive authorities, local self-government authorities related protection of the Bug River catchment area from pollution (including in the framework of international cooperation); legislative, regulatory, administrative acts, intergovernmental agreements on cooperation in the field of protection and usage of transboundary waters; funds of the State Budget of Ukraine allocated for implementation of measures aimed at protection of the Bug River basin from pollution during 2012–2014, as well as their usage; budgetary, and statistical reporting concerning the purpose of the audit.

Audited entities:

The Ministry of Ecology and Natural Resources of Ukraine (hereinafter – the Ministry), the State Agency of Water Resources of Ukraine (hereinafter – the Agency); Lviv and Volyn Regional State Administrations and their structural subdivisions, Western Bug

Basin Directorate, Lviv and Volyn Regional Departments of Water Resources, Lviv municipal entity "Lvivvodokanal".

Main audit conclusions and recommendations:

1. The Ministry and the Agency worked out a significant number of regulatory and technical documentations in the framework of cross-border cooperation in the Bug River basin aimed at improving of water policy in the basin and bringing it closer to EU standards.

However, these central authorities have failed to ensure full implementation of the recommendations of the Accounting Chamber submitted after the international audit on Protection of the Waters in the Bug River Catchment Area from Pollution, conducted by SAIs of Belarus, Poland and Ukraine and completed in 2006.

2. The Ministry and the Agency did not provide implementation of developed documentation into a system of government management in the field of waters protection, including Bug River catchment area. Consequently, increasing of efficiency of water protection measures and usage of the state budget funds were not achieved.

Based on the results of water monitoring at the regional level it was revealed that waters of the Bug River basin are still contaminated and their qualitative condition has not improved. At the same time the ecological state of the basin in the Lviv Region is characterized by increased anthropogenic load resulting from the discharge of polluted wastewater by the housing-and-utility companies (mainly in Lviv city).

Cleaning facilities of water supply systems are physically obsoleted. It led to the emergency situations and threats of uncontrolled discharges. However, investment activity aimed at waters improvement in the Bug River catchment area was insufficient and did not ensure predetermined targets.

3. According to the current legislation of Ukraine the governance in sphere of usage and protection of waters as well as renewal of water resources should carried out at the basin principle based on international, state target programs and regional programs. Actual regulations also provide a transition from territorial water resources management to integrated one.

However, issues of practical implementation of the regulatory principles have not been resolved, due to the timing mismatch of the introduction of integrated water resources management, foreseen by current legislation as well as administrative reform.

4. The organizational support of the basin principle of water management, including within the Bug River basin was launched by the Agency.

In 2005 the Western Bug Basin Directorate was established. In particular, it works as the executive body of the Western Bug Basin Council (the provisions on its activities were approved at its inaugural meeting in 2006). However, the practice of administrative-territorial water management was continuing. As a result, the Western

Bug Basin Directorate did not perform all the granted powers related to implementation of state policy in the sphere of usage, renewal and protection of water resources within the Ukrainian part of the Bug River catchment area. In particular, it concerns the implementation of relevant international, national and regional programs.

These tasks are performed according to areas serviced by structural units of Lviv and Volyn Regional Departments of Water Resources. It leads to difficulties in comprehensive planning and registration of water protection measures at the national and regional levels within the Bug River basin.

In addition, at the moment of audit completion issues of the establishment and operation of basin councils, legal status of their decisions as well as sources of financing for logistical and organizational support of their sessions were not resolved.

5. During 2012–2014, only 35.8% or about 4 million EUR of funds allocated from all sources were used on the implementation of water protection measures in the Bug River basin.

The state budget funds have formed the largest share of these funds (36%). They were allocated to the Ministry and Volyn Regional State Administration on four budget programs.

Local budget expenditures, the main source of which was local funds for environmental protection, amounted to 30%. Funds were mainly used for construction (reconstruction) of cleaning facilities for domestic waste waters and water supply systems, as well as for renewal of the favorable hydrological regime and sanitary condition of the river.

The main source of non-budget funds used for measures in the Bug River basin, were EU funds. These funds were involved by the Shatsk village authorities in the framework of the international project "Preservation of Ecosystem of Bug River Valley in the Border Areas of Poland, Belarus and Ukraine – the village Shatsk, Drainage, Reconstruction of Existing and Construction of New Sewage Network in Areas Surrounding to Black and Liutsymer Lakes".

However, these amounts of funds are insufficient to solve the problem of pollution of the Bug River basin. On the territory of Ukraine the main source of its pollution is sewage water of Lviv city. In particular, to address this issue as of 2012 financial need was defined in total more than 90 million EUR.

6. The Ministry did not comply with the recommendations of the Accounting Chamber and did not develop a program of water monitoring. As a result, there are no unified rules of information exchange between the subjects of monitoring as well as the form of presentation of observations.

The existing water monitoring system needed a substantial improvement in accordance with current requirements established in the EU countries for water monitoring.

The main problems of the water monitoring system are: low level of coordination of the subjects of monitoring works; insufficient infrastructure of the regional monitoring centers; lack of unified software and methodological support of databases and information exchange between the subjects of monitoring; lack of automatic observation points and practical evaluation of comprehensive forecasting of basin waters.

In addition, the instruments-and-technical basis of the subjects of monitoring was outdated because of underfunding in the previous years. It makes impossible obtaining complete information related the state of waters based on chemical and physical-and-chemical elements as well as the biological and hydromorphological indicators, which are the basic for classification of surface water bodies according to their ecological state (as its required by the EU Water Framework Directive).

7. International cooperation on the usage and protection of Bug River catchment area is carried out according to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes and is based on bilateral intergovernmental agreements between Ukraine and the Republic of Poland and Ukraine and the Republic of Belarus. These agreements define the activities of the relevant Commissions on border waters.

In fact, activities of Commissions on transboundary waters in the Bug River basin were actually blocked since 2014 because of discharge of Commissioner of the Government of Ukraine responsible on implementation of these agreements. This situation needs to be addressed.

As a result, the tasks of regulation of practical measures in the field of international cooperation were not fulfilled. These tasks concern establishment of common quality standards of transboundary waters conditions and criteria for discharge of wastewater and process water into the border waters, joint researches and exchange of information, coordination of programs of technical training, and establishment of the tripartite International Commission for the protection and use of water resources of the Bug River basin.

Based on the results of conducted audit the Accounting Chamber recommended, in particular:

1. To the Cabinet of Ministers of Ukraine to:

- ensure the adaptation of national legislation in the sphere of water relations to the requirements of EU legislation with the aim to implement the principle of integrated river basin management of water resources, including economic mechanisms of basin management (according to the commitments undertaken by Ukraine);
- appoint the Commissioner of the Government on border waters with the Republic of Poland and the Republic of Belarus; entrust them to intensify the activities of the working groups on water protection, to develop and agree on common documents stipulated by agreements;

- consider issue of financing the priority measures aimed at improvement of the ecological state of the Bug River catchment area;
- consider implementation of recommendations of the tripartite international project "Creation of Polish-Belarusian-Ukrainian Water Policy in the Bug River Basin", in particular, the creation of the International Commission for the Protection and Use of Water Resources of the Bug River Basin, with the aim to improve water management in this catchment area.
- 2. To Lviv and Volyn Regional State Administrations in the framework of their powers to:
 - provide measures for environmental rehabilitation of Bug River basin waters in the regional programs of economic and social development;
 - perform administrative support of participation of local communities in the cross-border cooperation programs and in the preparation of relevant projects jointly with regions of other countries related attraction of international assistance, particularly in the framework of cross-border cooperation "Poland-Belarus-Ukraine";
 - ensure proper organization and coordination of state environmental monitoring at the regional level, within defined powers;
 - establish effective control over the efficient and legality usage of state budget funds allocated for environmental protection measures.
- 3. To the Ministry in the framework of its powers to:
 - ensure implementation of measures related organizational structure and infrastructure improvement of the state monitoring system, as well as creation a common regulatory and methodological database, the automated evaluation system, environmental forecasting and decision support, within the Joint Monitoring bank of information resources;
 - take measures directed at strengthening of state supervision (control) over the quality and quantity of reverse water and pollutants discharged into the Bug River basin, through the coordination of the State Environmental Inspection of Ukraine;
 - together with Lviv and Volyn Regional State Administrations, to intensify cooperation with international organizations related attraction of international technical assistance to environmental rehabilitation of the catchment area, particularly in the framework of cross-border cooperation "Poland-Belarus-Ukraine";
 - ensure adequate internal control over efficient and legal use of state budget funds allocated for environmental protection measures in the Bug River basin.

Management responses:

The Verkhovna Rada of Ukraine adopted the Law of Ukraine from 04.10.2016 No 1641-VIII "On Amendments to some Legislative Acts of Ukraine Regarding the Implementation of Integrated Approaches to Water Management by Basin Principle". It was adopted with the aim of implementation of the Association Agreement.

The Law creates the legal preconditions for reform of water management through the transition from territorial to basin management where a river basin district should be a control unit. In addition, the Law provides the development of a number of documents aimed at implementation of new approaches into state water monitoring.

The Ministry elaborated the draft Concept of Reforming the State System of Environmental Monitoring".

The Concept involves determination of appropriate coordinators of respective monitor directions, particularly in the monitoring and assessment of water resources. The implementation of this task has to resolve issues related to the coordination of subjects of state environmental monitoring system concerning monitoring of water resources.

Due to appointment of the officials of the Agency (according to the Order of the Cabinet of Ministers of Ukraine dated 30.11.2016 No 888-r and the Order of the Cabinet of Ministers of Ukraine dated 30.11.2016 No 889-r) and with the aim to fulfill commitments of cooperation on border waters, based on international agreements, the Agency elaborated a draft Decree of the Cabinet of Ministers of Ukraine "On the Appointment of the Commissioner of the Cabinet of Ministers of Ukraine on Cooperation on Border Waters and their Deputies".

According to the Law of Ukraine "On the State Budget of Ukraine for 2016" it was provided expenditures for the budget program "Implementation of Environmental Protection Measures" and "Implementation of Measures related to Priorities of the Development of Environmental Protection". In the framework of these expenditures it was allocated funds for implementation of environmental protection measures in the cities of Glynyany and Zolochiv in the Lviv Region within the Bug River catchment area.

With the aim to fulfill recommendations of the Accounting Chamber the Volyn and Lviv Regional State Administrations worked out the issue of financial assistance by the National Fund for Environmental Protection and Water Management of the Republic of Poland for the modernization of treatment facilities.

In 2016 it was prepared the project proposal for the "Polish Aid" program on "Implementation of the EU Water Framework Directive – Introduction to Development of the Management Plan of the Bug River basin on the Ukrainian territory". However, this project proposal did not pass the selection.

In addition, in March, 2016 the Ministry addressed to the Minister of Environment of the Republic of Poland to contribute in attracting funds from international financial institutions and donor countries for the construction and reconstruction of treatment facilities in the Lviv Region.

The Agency has also informed about the implementation of the project "Creation of Polish-Belarusian-Ukrainian Water Policy in the Bug River Basin". In particularly, it was informed that after project completion, the Western Bug Basin Directorate based on agreed guidelines, has developed a typology of surface waters of the Bug River basin.

In 2016 the Agency, within its competence, considered the Draft Agreement on the Establishment of the International Commission for the Use and Protection of the Bug River basin. The Agency informed the Ministry of Environment of the Republic of Poland about necessity for additional consultation with the executive authorities, in particular concerning provision of appropriate fees for Commission activities.

Moreover, the improvement and unification of knowledge and awareness of transboundary water resources, expected effects of climate change, testing the approach of joint management of surface and underground water resources in the Bug River basin should be a precondition to signing of the abovementioned Agreement.

These measures are included into the project proposal "Strengthening of Cooperation between Countries and Joint Management of Surface and Groundwater Resources in Transboundary Basins of Bug River and Neman River and the Relevant Aquifers", elaborated by the UNDP GEF for Ukraine, Belarus and Poland. Therefore, this project implementation could be a common platform for further developments regarding the possibility of signing the Agreement.

